Contents Volume 69 (1992)

Vol. 69, Nos. 1+2 (April 24, 1992)

Use of sealed end hollow fibers for bubbleless membrane aeration: experimental studies
T. Ahmed and M.J. Semmens (Minneapolis, MN, USA) 1
The use of independently sealed microporous hollow fiber membranes for oxygenation of water: model development
T. Ahmed and M.J. Semmens (Minneapolis, MN, USA) 11
A study of pore size distribution and mean pore size on unsupported gamma-alumina membranes prepared by modifications introduced in the alkoxide hydrolysis step
Marta Isabel Dimitrijewits de Albani and Carlos Pablo Arciprete (Rio Negro, Argentina) 21
Determination of some transport coefficients for the skin and porous layer of a composite membrane
G. Jonsson (Lynby, Denmark) and J. Benavente (Málaga, Spain) 29
Unequivocal definition and determination of "dissolved gas" permeability and resistance of the liquid layers in contact lens applications
R.T. Chern and W. Gu (Raleigh, NC, USA) 43
Transport of a zwitter ion across a composite ion-exchange membrane involving the dual sorption mechanism
V. Šumberová (Prague, Czechoslovakia), G.A. Tishchenko (Leningrad, USSR), M. Bleha (Prague, Czechoslovakia), G.A. Denisov (Pushchino, USSR), V. Tyrácková (Prague, Czechoslovakia) and L.K. Shataeva (Leningrad, USSR) 51
New applications of crown ethers. 11. Structural effect of the counter anion on crown-ether mediated cation extraction and transport. A direct examination of the crown ether–cation complex in the organic phase of extraction and transport
G.-X. He, M. Kurita, I. Ishii, F. Wada and T. Matsuda (Fukuoka, Japan) 61
New applications of crown ethers. 12. "Double-cycle" transport mechanism for crown ether/2,6-di(*t*-butyl)-4-nitrophenol/alkylammonium salt system. Effect of reversed-micelle like aggregate of alkylammonium salts on cation transport through a liquid membrane
I. Ishii, M. Kurita, G.-X. He, F. Wada and T. Matsuda (Fukuoka, Japan) 75
Effects of pH and solvent density on dead-end upward ultrafiltration
E. Iritani, T. Watanabe and T. Murase (Nagoya, Japan) 87
A computational and experimental study of unsteady facilitated transport
S. Davis, T. Wydeven, A. Yum and C. Neukom (Moffett Field, CA, USA) 99
Pervaporation membranes for ethanol–water mixture prepared by plasma polymerization of fluorocarbons. II. Perfluoropropane membranes
T. Masuoka, T. Iwatsubo and K. Mizoguchi (Ibaraki, Japan) 109
Surface studies on the ultrathin membrane prepared by spreading the polymer solution on a water surface
K. Nakamae, T. Miyata and T. Matsumoto (Kobe, Japan) 121
Novel membrane separation method using liquid and porous polymeric membranes
A. Kataoka, T. Akedo and S. Manabe (Tokyo, Japan) 131
A novel tetradentate hydroxamate as ion carrier in liquid membranes
L. Bromberg, G. Levin, J. Libman and A. Shanzer (Rehovot, Israel) 143
Water sorption and ionic diffusion in short side chain perfluorosulfonate ionomer membranes
E.E. Boakye and H.L. Yeager (Calgary, Alta., Canada) 155
Non-isothermal solute transport through PTFE membranes
J.M. Ortiz de Zárate, A. Velázquez, L. Peña, F. García-López and J.I. Mengual (Madrid, Spain) 169
Short Communication
Scintillation proximity assay for measuring benzene absorption in a polyethylene membrane
M.A. Diaz, R.K. Mansfield, D. Bhattacharyya and M. Jay (Lexington, KY, USA) 179

Contents Volume 69 (1992)

Vol. 69, Nos. 1+2 (April 24, 1992)

Use of sealed end hollow fibers for bubbleless membrane aeration: experimental studies
T. Ahmed and M.J. Semmens (Minneapolis, MN, USA) 1
The use of independently sealed microporous hollow fiber membranes for oxygenation of water: model development
T. Ahmed and M.J. Semmens (Minneapolis, MN, USA) 11
A study of pore size distribution and mean pore size on unsupported gamma-alumina membranes prepared by modifications introduced in the alkoxide hydrolysis step
Marta Isabel Dimitrijewits de Albani and Carlos Pablo Arciprete (Rio Negro, Argentina) 21
Determination of some transport coefficients for the skin and porous layer of a composite membrane
G. Jonsson (Lynby, Denmark) and J. Benavente (Málaga, Spain) 29
Unequivocal definition and determination of "dissolved gas" permeability and resistance of the liquid layers in contact lens applications
R.T. Chern and W. Gu (Raleigh, NC, USA) 43
Transport of a zwitter ion across a composite ion-exchange membrane involving the dual sorption mechanism
V. Šumberová (Prague, Czechoslovakia), G.A. Tishchenko (Leningrad, USSR), M. Bleha (Prague, Czechoslovakia), G.A. Denisov (Pushchino, USSR), V. Tyrácková (Prague, Czechoslovakia) and L.K. Shataeva (Leningrad, USSR) 51
New applications of crown ethers. 11. Structural effect of the counter anion on crown-ether mediated cation extraction and transport. A direct examination of the crown ether–cation complex in the organic phase of extraction and transport
G.-X. He, M. Kurita, I. Ishii, F. Wada and T. Matsuda (Fukuoka, Japan) 61
New applications of crown ethers. 12. "Double-cycle" transport mechanism for crown ether/2,6-di(*t*-butyl)-4-nitrophenol/alkylammonium salt system. Effect of reversed-micelle like aggregate of alkylammonium salts on cation transport through a liquid membrane
I. Ishii, M. Kurita, G.-X. He, F. Wada and T. Matsuda (Fukuoka, Japan) 75
Effects of pH and solvent density on dead-end upward ultrafiltration
E. Iritani, T. Watanabe and T. Murase (Nagoya, Japan) 87
A computational and experimental study of unsteady facilitated transport
S. Davis, T. Wydeven, A. Yum and C. Neukom (Moffett Field, CA, USA) 99
Pervaporation membranes for ethanol–water mixture prepared by plasma polymerization of fluorocarbons. II. Perfluoropropane membranes
T. Masuoka, T. Iwatsubo and K. Mizoguchi (Ibaraki, Japan) 109
Surface studies on the ultrathin membrane prepared by spreading the polymer solution on a water surface
K. Nakamae, T. Miyata and T. Matsumoto (Kobe, Japan) 121
Novel membrane separation method using liquid and porous polymeric membranes
A. Kataoka, T. Akedo and S. Manabe (Tokyo, Japan) 131
A novel tetradentate hydroxamate as ion carrier in liquid membranes
L. Bromberg, G. Levin, J. Libman and A. Shanzer (Rehovot, Israel) 143
Water sorption and ionic diffusion in short side chain perfluorosulfonate ionomer membranes
E.E. Boakye and H.L. Yeager (Calgary, Alta., Canada) 155
Non-isothermal solute transport through PTFE membranes
J.M. Ortiz de Zárate, A. Velázquez, L. Peña, F. García-López and J.I. Mengual (Madrid, Spain) 169
Short Communication
Scintillation proximity assay for measuring benzene absorption in a polyethylene membrane
M.A. Diaz, R.K. Mansfield, D. Bhattacharyya and M. Jay (Lexington, KY, USA) 179

Book Review 185
Meeting Announcement 186
Meetings Calendar 187

Vol. 69, No. 3 (May 6, 1992)

Transport and separation of proteins by ultrafiltration through sorptive and non-sorptive membranes
S. Nakatsuka and A.S. Michaels (Raleigh, NC, USA) 189
Osmotic pressure measurements of dissociating bovine hemoglobin
E.M. Trujillo (Salt Lake City, UT, USA) 213
Sorption and transport of ethanol and water in poly(ethylene-co-vinyl acetate) membranes
S.M. Dinh, B. Berner (Ardsley, NY, USA), Y.-M. Sun (Taoyuan, Taiwan) and P.J. Lee (Toronto, Ont., Canada) 223
Mass transfer in various hollow fiber geometries
S.R. Wickramasinghe, M.J. Semmens and E.L. Cussler (Minneapolis, MN, USA) 235
Interaction behaviour in ultrafiltration of nonionic surfactants. Part 1. Flux behaviour
D. Doulia, V. Gekas and G. Trägårdh (Lund, Sweden) 251
Membrane reactor with double mass transfer: membrane requirements, fouling analysis and flux prediction during ultrafiltration of cell culture medium
M.P. Elluard and A. Maurel (Saint-Paul-lez-Durance, France) 259
Electrotransport of alanine through ion-exchange membranes
D. Martinez, R. Sandeaux, J. Sandeaux and C. Gavach (Montpellier, France) 273

Book Review 283
Meetings Calendar 284
Author Index Volume 69 (1992) 286
Subject Index Volume 69 (1992) 287